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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/780,783	02/18/2004	Alex Krister Raith	4015-5196	2741
24112 7590 10/15/2008 COATS & BENNETT, PLLC 1400 Crescent Green, Suite 300 Cary, NC 27518				
EXAMINER				
NGO, NGUYEN HOANG				
ART UNIT		PAPER NUMBER		
2416				
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10/15/2008		PAPER		

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/780,783

Applicant(s)

RAITH, ALEX KRISTER

Examiner

NGUYEN NGO

Art Unit

2416

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 01 August 2008.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 42-55 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 42-55 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SG/US)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

Response to Amendment

This communication is in response to the amendment of 8/1/2008. Accordingly, Claims 42-55 are currently pending in the application.

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

3. Claims 42-55 are rejected under 35 U.S.C. 103(a) as being unpatentable over Funk (US 6169884), in view of Kleider et al. (US 6084919), hereinafter referred to as Funk and Kleider.

Regarding claim 42, Funk discloses a transceiver in a radio communication system (apparatus for reducing power in radio transmitters, abstract) comprising:

a transmitter for transmitting data over an air interface at a transmission data rate (radio 101 of figure 1 consisting of antenna 113 that radiates an amplified transmission signal, col3 lines 30-40 and figure 1);

a temperature measuring device for determining a temperature of said transceiver (the thermistor 115 of figure 1, col3 lines 13-53); and

a processor (processor 109 of figure 1) coupled to said transmitter and said temperature measuring device, said processor configured to compare said measured temperature with a threshold temperature (a high temperature threshold, col3 lines 40-67) and selectively modify a transmit power level or a transmission data rate associated with transmitting the data from said transceiver based on said comparison (control transmission power, col3 lines 46-67). Funk further discloses that transmission power may be reduced (modify a transmit power level) by inserting brief pauses at intervals during the transmission (col4 lines 29-41).

Funk however fails to specifically disclose modifying the transmit power level and the transmission data rate as argued by applicant. Funk however discloses modifying a transmission power or modifying the transmission data rate, as Funk clearly discloses, instead of reducing the power level, inserting brief pauses at intervals during the transmission, in which Examiner interprets as modifying a transmission data rate (col4 lines 30-35). In a similar endeavor, Kleider discloses of a system which maintains a spectral profile of a channel and uses the profile to determine appropriate transmit parameters for the system (abstract) and further discloses that a wide range of transit

parameters can be varied in response to the information sensed by the transmit unit and that data rate and/or power level of the transmit signal can be adjusted (col8 lines 16-27). Thus it would have been obvious to a person skilled in the art to incorporate the concept of selectively modifying a transmit power level and a transmission data rate (transmission parameters) associated with transmitting data from a transceiver as disclosed by Kleider into the method and apparatus for reducing power in radio transmitters as disclosed by Funk, in order to efficiently improve system performance by varying a combination of transmit parameters.

Regarding claim 43, Funk discloses the transceiver of claim 42, further comprising an output device associated with said transceiver for providing an indication of said measured temperature (display 117 of figure 1, col3 lines 30-67).

Regarding claim 44 and 45, Funk discloses the transceiver of claim 42, wherein said processor is further configured to respond to transmit power control commands (col3 lines 30-37 and col4 lines 30-43).

Regarding claim 46, Funk discloses the transceiver of claim 45, wherein said processor is further configured to request said transmission data rate reduction prior to implementing said transmission rate reduction (col3 lines 30-37 and col4 lines 30-40).

Regarding claim 48, 55 Funk discloses the transceiver of claim 42, wherein said processor is further configured to cause said transmit power and said transmission data rate to be reduced when said measured temperature exceeds said threshold temperature (col3 lines 30-65).

Regarding claim 53, Funk discloses a mobile station in a radio communication system (reducing heat buildup within a mobile radio device having a radio transmitter, abstract) comprising:

- a temperature measuring device for measuring a temperature level in said mobile station (the thermistor 115 of figure 1, col3 lines 13-53);

- a processor for selectively modifying a transmit power level or a transmission data rate associated with transmitting data from the mobile station over an air interface responsive to said measured temperature level (control transmission power, col3 lines 46-67). Funk further discloses that transmission power may be reduced (modify a transmit power level) by inserting brief pauses at intervals during the transmission (col4 lines 29-41);

- an output device for providing an indication of said modified transmission power (display 117 of figure 1, col3 lines 30-67).

Funk however fails to specifically disclose modifying the transmit power level and the transmission data rate as argued by applicant. Funk however discloses modifying a transmission power or modifying the transmission data rate, as Funk clearly discloses

instead of reducing the power level, inserting brief pauses at intervals during the transmission (col4 lines 30-35). In a similar endeavor, Kleider discloses of a system which maintains a spectral profile of a channel and uses the profile to determine appropriate transmit parameters for the system (abstract) and further discloses that a wide range of transit parameters can be varied in response to the information sensed by the transmit unit and that data rate and/or power level of the transmit signal can be adjusted (col8 lines 16-27). Thus it would have been obvious to a person skilled in the art to incorporate the concept of selectively modifying a transmit power level and a transmission data rate (transmission parameters) associated with transmitting data from a transceiver as disclosed by Kleider into the method and apparatus for reducing power in radio transmitters as disclosed by Funk, in order to efficiently improve system performance by varying a combination of transmit parameters

Regarding claim 47, 49, 50, 51, 52, 54 Funk and Kleider fails to specifically disclose causing an indication of said transmission data rate modification to be transmitted to a remote device in the radio communication system. Funk however discloses that a user may be apprised of temperature readings by means of a graphical display (col3 lines 45-51). It would have thus been obvious to a person skilled in the art at the time the invention was made to inform users of changes in transmission data rates as well as transmission power. It would have further been obvious to display such readings as a percentages pertaining to maximum transmission power of the transceiver (radio device) and maximum transmission power allowed by the radio communication system

since it is beneficial to a mobile user as what to anticipate when information related to reduction in data transmission is provided.

Response to Arguments

1. Applicant's arguments filed 8/1/2008 have been fully considered but they are not persuasive.
2. Applicant submits that the combination of Funk and Kleider fails to disclose the limitation of selectively modify a transmit power level and a transmission data rate. Examiner however respectfully disagrees. It is agreed upon by applicant that Funk discloses modifying a transmit power level as seen from the remarks (page 3). However applicant states that Funk fails to disclose modifying a transmission data rate, and further goes on to the teachings of Funk involving SAT. However Funk clearly states that transmission power may be reduced by inserting brief pauses at intervals during the transmission (col4 lines 30-35). Examiner interprets this to correlate to modifying a data rate. Applicant further goes on to explain the teaching found in col4 lines 48-60. Funk however specifically states **"One method of reducing power by inserting brief pauses during transmission is to monitor..."** implying that there are other ways involving pause periods. However, Funk clearly shows that transmission power may be reduced through reducing power levels (col4 lines 30-34). Examiner thus uses the teachings of Kleider to show the simple and known concept of reducing transmission power levels using other variables other than reducing power levels (as taught by Funk)

such as data rates (col8 lines 15-35). Thus it would have been obvious to further use techniques such as modifying of data rates as well as power levels.

Conclusion

3. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to NGUYEN NGO whose telephone number is (571)272-8398. The examiner can normally be reached on Monday-Friday 7am - 3:30 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Firmin Backer can be reached on (571)272-6703. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 2416

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Nguyen Ngo

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Patent Examiner AU 2614

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/N. N./**Examiner, Art Unit 2416****/FIRMIN BACKER/****Supervisory Patent Examiner, Art Unit 2416**